Weekly COVID-19 Epidemiological Update - Region of the Americas
Issue 16, published May 24, 2022

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Executive Summary

- Since the onset of the pandemic in 2020 and up to May 24, 2022, a cumulative total of approximately 523.7 million COVID-19 cases including about 6.3 deaths were reported from all six WHO regions. During epidemiological week (EW) 20, cases increased in the regions of Western Pacific (5.6%) and the Americas (6.9%) while they decreased in the four WHO regions. COVID-19 deaths increased in the regions of Europe (30.1%) and Western Pacific (0.6%) while they decreased in the remaining four WHO regions.

- Globally, approximately 3,743,444 new COVID-19 cases were reported in EW 20 (May 15, 2022-May 21, 2022) - a 2.6% decrease compared to EW 19 (May 08, 2022-May 14, 2022) (Figure 1). For the same period, 9,814 new COVID-19 deaths were reported globally – a 7.5% relative decrease compared the previous week.

- In the region of the Americas, 980,618 cases and 3,622 deaths were reported in EW 20 - a 6.9% increase in cases and 1.1% decrease in deaths compared to the previous week.

- At the subregional level, COVID-19 cases increased in all four subregions (range: 0.1-12.3% increase). During EW 20, COVID-19 deaths increased in Central America (19.2%) and the Caribbean and Atlantic Ocean Islands (6%), while they observed no significant changes in the two remaining subregions – North America (-2.9%) and South America (-0.5%) – compared to the previous week.

- The overall weekly case notification rate for the region of the Americas was 95.9 cases per 100,000 population during EW 20 (89.7 the previous week). Between EW 20 and 19, the 14-day COVID-19 death rate was 7.1 deaths per 1 million population (7.8 the previous two weeks).

- Among 32 countries/territories in the region with available data, COVID-19 hospitalizations increased in 13 countries and territories (range: 1% - 250%) during EW 20 compared to the previous week. Among 28 countries/territories with data available for COVID-19 ICU admissions, 8 observed an increase in weekly ICU admissions (range: 11.1% - 300%)

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4, 2020 – EW 20, 2022.
During EW 20, 980,618 new COVID-19 cases were reported in the region of the Americas - a relative increase of 6.9% compared to previous week (Figure 2). The highest number of weekly cases was observed in the North American region (698,175 cases, 8% increase), while relative increase of weekly cases was observed in the Central American region (35,783 cases, 12.3% increase) during EW 20. (Table 1). At the national level, the highest proportion of weekly cases during EW 20 were reported by the United States of America (669,168 cases, 10.8% increase), Brazil (97,674 cases, -19.2% decrease), and Argentina (43,487 cases, 27.9% increase).

Table 1: Weekly change (%) in cases and deaths between EW 19 and EW 20 by subregion. Region of the Americas.

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Total Cases</th>
<th>Total Deaths</th>
<th>Cases EW 19</th>
<th>Deaths EW 19</th>
<th>Cases EW 20</th>
<th>Deaths EW 20</th>
<th>% Change Cases</th>
<th>% Change Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean and Atlantic Ocean Islands</td>
<td>3,606,607</td>
<td>33,049</td>
<td>53,035</td>
<td>116</td>
<td>54,949</td>
<td>123</td>
<td>3.6%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Central America</td>
<td>3,219,934</td>
<td>50,591</td>
<td>31,860</td>
<td>146</td>
<td>35,783</td>
<td>174</td>
<td>12.3%</td>
<td>19.2%</td>
</tr>
<tr>
<td>North America</td>
<td>91,945,553</td>
<td>1,362,349</td>
<td>640,975</td>
<td>2,447</td>
<td>698,175</td>
<td>2,376</td>
<td>8.0%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>South America</td>
<td>57,167,537</td>
<td>1,294,552</td>
<td>191,458</td>
<td>954</td>
<td>191,636</td>
<td>949</td>
<td>0.1%</td>
<td>-0.5%</td>
</tr>
</tbody>
</table>

During EW 20, a total of 3,622 COVID-19 deaths were reported in the region of the Americas – a relative decrease of -1.1% compared to previous week (Figure 2). The subregion reporting the highest number of COVID-19 deaths was North America (2,376 deaths, -2.9% decrease) (Table 1). At the national level, the countries/territories with the highest proportion of weekly deaths during EW 20 were the United States of America (1,915 deaths, -0.3% decrease), Brazil (713 deaths, 3.5% increase), and Canada (437 deaths, -12.8% decrease) relative to EW 19.

A summary of the COVID-19 trends for EW 20 by subregion is presented below.
North America

The overall trends for COVID-19 cases have been increasing in North America for the last eight consecutive weeks as of EW 20. During EW 20, the largest relative increase in the subregion was observed in Mexico (6,302 cases, 33.6 % increase) – where there has been an increase in weekly new cases for past five consecutive weeks – and the United States of America (669,168 cases, 10.8 % increase) – which accounts for the largest proportion of reported cases in the region of the Americas. On the other hand, Canada has been observing a decline in weekly cases since EW 15, 2022, reporting a 30% decline (20,705 cases) during EW 20 relative to the previous week.

**Figure 3:** COVID-19 cases and deaths by epidemiological week (EW). North America. Region of the Americas. EW 3, 2020 - EW 20, 2022.

**Weekly COVID-19 deaths** decreased by 2.9% in the North American region during EW 20 relative to the previous week. All three countries in the subregion showed a decline in weekly deaths with the largest declines reported by Canada (437 deaths, 12.8% decrease), followed by Mexico (24 deaths, 7.7% decrease), and the United States of America (1,915 deaths, -0.3% decrease).

Among two countries with data available for COVID-19 hospitalizations and ICU admissions, Canada continued to observe a decline in both weekly hospitalizations and ICU admissions during EW 20. On the other hand, the United States of America continued to report an increase in their weekly COVID-19 hospitalizations (24,774 hospitalizations, 12.9%) as well as in ICU admissions (2,668 ICU admissions, 11%).

**Severity trends** remained elevated in the United States of America where there was a 12.9% increase of weekly hospitalizations and 11% increase of weekly ICU admissions during EW 20. According to the Coronavirus Disease 2019-Associated Hospitalization Surveillance Network (COVID-NET) of the Centers for Disease Control and Prevention (CDC), the 7-day daily average in new hospital admissions due to COVID-19 was approximately 3,226 admissions, representing a 9.2% increase during EW 20 compared to the previous week. Notably, COVID-19 hospitalization rates among adults ages above 65 years have seen the sharpest increase in rates, from 6.5 per 100,000 population on April 2, to 15.6 per 100,000 population as of April 30, 2022. Nearly 91% of the adult population ≥ 65 Years of Age in the United States have received a “completed

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schedule” of their COVID-19 vaccine. However – for the same age group – the rates are much lower for those who received their first booster dose (69.4%) and ever lower for those who received their second booster dose (26.3%). According to the latest U.S. CDC data, compared to fully vaccinated persons ≥ 65 years of age with additional or booster doses, unvaccinated individuals in the same age-group had a 6.3 times higher rate of COVID-19 hospitalization.2

Central America

In Central America, the overall COVID-19 incidence for the sub-region continued to increase for the past five consecutive weeks with 35,783 new cases reported during EW 20 – a 12.3% increase compared to the previous week (Figure 4).

Figure 4: COVID-19 cases and deaths by epidemiological week (EW). Central America. Region of the Americas. EW 6, 2020 - EW 20, 2022.

Out of the seven countries and territories in the subregion, five countries/territories observed an increase in weekly new COVID-19 cases. The biggest relative increase among them was observed in Belize (523 cases, 84.2% increase), followed by Costa Rica (11,369 cases, 28.1% increase), Guatemala (3,925 cases, 27.9% increase), and Panama (19,528 new cases, 2.6% increase).

During EW 20, COVID-19 weekly deaths increased by approximately 19.2% relative to the previous week (Figure 4). The increase was mainly contributed by three countries/territories – Guatemala (131 deaths, 20.2% increase), Costa Rica (28 deaths, 21.7% increase), and Panama (12 deaths, 9.1% increase) – reporting an increase in their weekly individual trends.

Among four countries and territories with available data weekly COVID-19 hospitalizations in the Central American Subregion – while Honduras reported a 16.3% decline in its weekly hospitalizations (n=41 hospitalizations) – the remaining three reported an increase in their weekly COVID-19 hospitalizations – Belize (n=9 hospitalizations, 125% increase), Panama (n=274 hospitalizations, 48.1% increase), and Costa Rica (n=307 hospitalizations, 1% increase). In terms of weekly COVID-19 ICU admissions; Panama reported a 56% increase (n=39 ICU admissions) while Honduras observed an 83.3% decrease (n=1 ICU admission), and Costa Rica reported no change (n=48 ICU admissions) during EW 20 compared to the previous week.

Severity trends in the subregion for EW 20 are rising in Panama where there has been an upward trend in its weekly deaths (12 deaths, 9.1% increase) as well as in COVID-19 weekly hospitalizations (274 hospitalizations, 48.1% increase) including COVID-19 ICU admissions (39 ICU admissions, 56% increase). In addition, Belize has also begun observing a large increase in its hospitalizations (9 hospitalizations, 125% increase), along with increased cases (523 cases, 84.2% increase) and deaths (1 death, 100% increase) relative to the previous week.

South America

Figure 5: COVID-19 cases and deaths by epidemiological week (EW). South America. Region of the Americas. EW 3, 2020 - EW 20, 2022.

In South America, the overall COVID-19 incidence for the subregion remain stable for the second consecutive week with 191,636 new COVID-19 cases reported during EW 20 – a 0.1% difference compared to the previous week (Figure 5).

Out of the 10 countries and territories the sub-region, COVID-19 weekly cases increased in eight countries/territories during EW 20 (range: 14.7 – 156.6% increase. The largest increase was observed in Bolivia (Plurinational State of) (1,193 cases, 156.6% increase), followed by Colombia (3,795 cases, 127.1% increase), and Paraguay (354 cases, 67.8% increase). Only Venezuela (Bolivarian Republic of) and Brazil observed a decreasing trend in their COVID-19 incidence – 7.8% (273 cases) and 19.2% (97,674 cases) decreases respectively in Venezuela and Brazil.

During EW 20, a total of 949 COVID-19 deaths was reported in South America – no significant change (-0.5% decrease) compared to the previous week with four countries/territories reporting a decline (range: -55.6 – 9.4% decrease). The biggest relative increase in COVID-19 weekly deaths was observed in Bolivia (Plurinational State of) (17 deaths, 1600% increase) due to 16 historical deaths being included in the recent publication³, followed by Uruguay (12 deaths, 500% increase), and Venezuela (Bolivarian Republic of) (4 deaths, 100% increase) in EW 20 relative to the previous week.

³ Ministerio de Salud y Deportes. Bolivia Presenta el 50% de ascenso de casos por segunda semana consecutiva, pero reduce tasa de letalidad a 0.6%. Available at: https://bit.ly/3MCYksp
All five countries and territories with data available for **COVID-19 hospitalizations** reported a decline in their weekly COVID-19 hospitalizations (range: -38.7 - -1.4% decrease) during EW 20 relative to the previous week. Similarly, among seven countries/territories with data available for **COVID-19 ICU admissions**, five reported a decrease in their weekly COVID-19 ICU admissions (range: -23.3 - -8.8% decrease) and two reported no change - Venezuela (Bolivarian Republic of) (20 ICU admissions) and Uruguay (63 ICU admissions) compared to the previous week.

**Severity trends** remained elevated in Uruguay where there has been a 500% increase in weekly deaths (12 deaths) along with a sharp increase observed in weekly cases (8,310 cases, 50.1% increase) although ICU admission rates remained stable in EW 20 compared to the previous week.

### Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** have been increasing for the last six consecutive weeks. During EW 20, COVID-19 cases increased by 3.6% and weekly deaths increased by 6.0% compared to the previous week (Figure 6). At the national level, cases increased in 18 out of the 34 countries and territories in the subregion (range: 1.3% - 153.4%), remained the same in Turks and Caicos Islands (51 new cases), and declined in the remaining 15 countries/territories (range: -100% - -6.1%)

**Figure 6:** COVID-19 cases and deaths by epidemiological week (EW). Caribbean and Atlantic Ocean Islands. Region of the Americas. EW 6, 2020 - EW 20, 2022.

During the same period, **COVID-19 weekly deaths** continued to increase in the subregion (123 deaths, 6% increase). The largest increase in weekly deaths was observed in the Bahamas (9 deaths, 200% increase) and Puerto Rico (49 deaths, 122.7% increase) in EW 20 compared to the previous week. However, 9 deaths reported from Bahamas are historical deaths that have been recently reclassified and included in its total deaths for EW 20. In the subregion, eight out of 10 countries/territories that observed an increase in their weekly deaths reported between 1 to 3 deaths (100-200% increase) during EW 20. Weekly deaths either remained the same (Trinidad and Tobago, 21 deaths) or declined in the remaining countries and territories of the subregion (range: -100 - -8.3% decrease).

Among 21 countries/territories with available data, nine countries/territories observed an increase in their **weekly COVID-19 hospitalizations** (range: 5.7 – 244.4% increase), five reported a decline (range: -100 - -10% decrease), and six remained the same in EW 20 compared to the previous week. For 16 countries and territories with data available for **COVID-19 ICU admissions**, five...
admissions, six reported an increase in their weekly COVID-19 ICU admissions (range: 11.1 – 300% increase), five reported a decline (range: -100 - -22.2% decrease), and four remained the same in EW 20.

**Significant increases in weekly cases** were observed in Antigua and Barbuda (147 cases, 153.4% increase), Saint Kitts and Nevis (49 cases, 122.7% increase), the Bahamas (318 cases. 80.7% increase), and Saint Vincent and the Grenadines (102 cases, 70% increase).

During EW 20, **important increases in severity trends** continued to be observed in Puerto Rico where there is a continued increase in hospitalizations (410 hospitalizations, 11.7% increase) and ICU admissions (48 ICU admissions, 17.1% increase), along with the elevated number of weekly deaths (49 deaths, 122.7% increase) compared to the previous week.

**Immunization**

Figure 7 shows the COVID-19 vaccination uptake with completed schedule and additional doses in the region of the Americas as of April 2022.

**Figure 7.** COVID-19 vaccination uptake with complete schedule and additional doses by month. Region of the Americas. January 2021 to April 2022.

Regional reports on COVID-19 vaccination efforts in the Americas show that countries started offering the 1st additional dose of COVID-19 vaccine to their citizens in July 2021. Since then, the monthly uptake for these doses has increased significantly up to February 2022. Conversely, the vaccination coverage rate of the primary series (i.e., first two doses of vaccine) reached a peak of 9.2% in October 2021 but has been steadily declining ever since. We note that the focus of national vaccination efforts has shifted, from the completion of a primary series to the application of additional doses for persons who are already “fully vaccinated”. If the proportion of persons with incomplete vaccination series remains high, the overall coverage rate of a country remains subpar regardless of the number of additional doses administered.
A similar pattern seems to be emerging with the application of a 2nd additional dose, whose monthly uptake has been increasing since February 2022. Data available from the last two months (March and April) are particularly interesting. Monthly uptake for both the primary series and the 1st additional dose declined, but this gap was “compensated” by the increased uptake in 2nd additional doses in April 2022.

A renewed focus on primary series vaccination is of the utmost importance to increase regional coverage levels and to achieve the global target of 70% vaccination coverage rate by 30 June 2022. Countries/territories should still encourage the administration of additional doses, especially among high-risk priority groups. However, these efforts should not divert resources from the main task of reducing the number of zero-dose individuals and those with an incomplete primary series. It is encouraged that countries to follow these guidelines and thereby maximize the protection of the population against the SARS-CoV-2 virus and lower the national hospitalization and mortality rates.

**Genomic Surveillance**

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 351,559 full genome sequences of SARS-CoV-2 from Latin America and the Caribbean have been uploaded to the Global Initiative on Sharing All Influenza Data (GISAID) platform up to 24 May 2022.

After the introduction of the Omicron VOC in the Americas by the end of December 2021, it has rapidly increased in prevalence and has been officially reported by 54 countries or territories. Omicron is now predominant in all PAHO countries with the BA.1 and BA.1 sub lineages identified in more than 82% of the characterized samples from the Americas, less than 18% of BA.2 (and BA.2 sublineages), and only 34 samples of BA.3 detected so far. The BA.4 and BA.5 sub-lineages account for 0.02% and 0.01% respectively of samples detected.

**Spotlight: Sequencing and genomic surveillance at Central American subregion**

During the last 16 months (January 2021 to 5 May 2022), 10,804 whole genome sequences from Central American countries have been generated as part of the genomic surveillance systems (**Figure 8**). The “previously circulating” VOC (Alpha-last detected 17 September 2021; Beta-last detected 8 July 2021; Gamma-last detected 14 November 2021) and the “currently circulating” VOC (Delta-last detected 27 January 2022; and Omicron) have been detected in the subregion, in addition to “previously circulating” VOIs Lambda (last detected 24 October 2021) and Mu (last detected 10 November 2021) and other lineages/variants (**Figure 9,10**).

After replacing Delta, Omicron has been predominant in the subregion, being detected in 759 samples (96%) sequenced and reported to GISAID during the last 8 weeks of available data (13 March to 7 May). Since Omicron’s first detection, BA.1 and BA.1 sublineages represent the majority (83%) of sequences, while BA.2 and BA.2 sublineages represent 17% of the sequences with 1 sample of BA.4 detected while BA.3 and BA.5 have not been detected. However, the proportion of sequences identified as BA.1 (and BA.1 sublineages) has been decreasing for the past 8 weeks where data is available (13 March to 7 May) while BA.2 (and BA.2 sublineages) has been increasing during the same time period. In EW 18-2022, BA.2 and its sublineages increased to 95% of sequences submitted.
**Figure 8.** Number of sequences generated monthly by countries in the Central American subregion (January 2021-May 2022)

Source: GISAID

**Figure 9.** Variants detected and reported by countries in the Central American subregion January 2021-May 2022)

Source: GISAID.
Country-specific data is available at: https://ais.paho.org/phip/viz/SARS_CoV2_variants_regional.asp
Figure 10. Distribution of VOC and VOI identified by countries in the Central American subregion (January 2021-May 2022)

Nicaragua has also officially reported Omicron detection and circulation. Nevertheless, sequences are not available yet at GISAID.

Figure 11. Distribution of VOC Omicron sublineages identified by the countries in the Central American subregion (January-May 2022)
Annex 1. percentage of population with complete COVID-19 vaccine schedule and percent of population having received at least one booster dose by country. The region of the Americas. As of EW 20, 2022.

The maps (Annex 1) represent the percentage of population with complete COVID-19 vaccine schedule by country (left), and percent of population having received at least one booster dose (right), as of May 20, 2022. Overall, most countries/territories in the Americas reported over 50% of their population having received a complete COVID-19 Vaccine Schedule. On the other hand, about half of all countries/territories in the Americas reported having vaccinated over 20% of their population with a booster dose.

In general, countries/territories reporting highest coverage for complete schedule similarly reported relatively higher percentage of population having received at least one booster dose. Those countries are Canada, Cuba, Puerto Rico, Peru, Chile, Argentina, and Uruguay (>80% of population with completed COVID-19 Vaccine Schedule, and between 45-75% of population that has received at least one booster dose).

Lower vaccination rates were found mostly in the Caribbean and the Guiana shield. countries/territories reporting below 30% vaccine coverage include: Haiti, Jamaica, Saint Vincent and the Grenadines, French Guiana, and Saint Lucia. Those countries also reported low percentage of their population having received at least one booster dose. Aruba, Nicaragua, Venezuela, and Dominica also reported less than 5% of their population having received a booster dose.